Mott Journal #3 [PN-80-06-08]

This is the third of six pocket notebooks used by Charles P. Mott, a member of the office staff at Menlo Park, to record daily activities at the laboratory. The entries from these notebooks were used as the basis for more extensive entries recorded by Mott in Menlo Park Notebooks #53 and #117. This pocket notebook covers the period June-July 1880. The front cover is labeled "152" and is inscribed "No. 3." The book contains approximately 40 unnumbered pages.

PN-80-06-08
E-326

Basel fiber lamp tests
No 39- 216-to end

Thursday June 5

Our Tudor bags of ore from Mr. Virginia Mines was this Morning. Virginia also has bits of ore from Virginia, in yard, Brownlow & Wade

Visitors Mr Bailey, Tiago de Castro, Consul at Lobito, & Mr Parker

Freighting on R.R. being carried on as usual on the morning of Sun.

Mails in which is a card from Blatt, from your Daddy, Mr. Wade, addressed by Mr. G. to Hammond Brooks.

Washes Mr. G. having a parcel with you attached as usual and water forced up through the cylinder lining to be washed. Mr. G.

Friday June 11.

Alexander Bolleter on N.H. to Meet
Rec letter

Absence Mr Edison on 11 29

Thomas Ford sure engine Lathe
Francis to make list of ... of Estimated
Cost ... 84% to 79% + 10%
in candles from 16% to 12%

Work Miller Dean tried the new
Roller & wood Milling Cutters
Met Rapp.

Magnetic Brush which being made
by Mr Krenie

Wednesday & Thursday ERRR
Working I was away during the
5210 fired Applications in which
Nothing was at work Tried equipo
Experiments on Soldering gas & Steam
Kept in furnace some and that
some results have been made
Measurements fired also Three or
Four Momentary Sparks Minutes
of the Pumps and Cracking Nuts
to Lamp Factory. Tuesday Since
at work on Chart in Bath Room
the Manner of which was Discussed

Gas pipe some gotten out by Bradley
Rand Cartwright

Amendments circular for an non
on account of consolidation

Magnetic Gear Sketch of made by
Mr Edison

P.R.R. Mess working on Extension

Saturday June 12	Monday June 14
Best filament Mr. E. informed that Bost filament shrinks in carbonizing 17 % weight K 33 % in paper & wood. Four lamps of Fast & slow made to day. No 1 gun 3 3/4 ohms 4 R by Wheatstone	Are stating experiments continued Yesterday by Mr. Edison using only Leathern cords and [illegible]
Small generator. Soft iron magnet bobbins ready to put together	Broken Sun of Troy contains [illegible]
Gear & pinion making & fitting on & casting blue plating.	[illegible]
Fitting Dynamo of Magnetic [illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

Bastfeld Bradley invited with the requirements for cutting out plates in Potash in Laboratory & got rid of some of the samples.

Visit Exp by Mr. Sim

Tuesday June 15

Continue experiments by Russell & Lampson between steam & condenser.

Bastfeld lamp burning dim 46 candles being light = [illegible] to [illegible] for comparison [illegible] (Book 28 page 113)

Gump Farley Gas Works Lake & Lamp Swinburne pressure pump

Pt. Water cons & condensing cons water and small consumed

Gain handcan hand dividing given to students by shifting rails in part of motor structure by Mr Hornby

Coffin optician pattern made for testing to try to determine the power. Friday June 17

Laying conductors with insulation for a few days no more work

Edison machine assembling and preparing that conductor to Pipes and working it pipes off to lamps Neily

Wednesday June 16	Thursday June 17
Tastings 8 kegs from Hazard Bros	Lamp Experimental with Mica Jacketed
Home Brewed Mores	Eye & keg with cockroaches dead in
Special Classes: Eggs by Mons	Flying double lamp with vacuating
	surface of eye.
Absent Mr. Eaton office in dispensing	Poles in the home & commencement
	Cases poles on the [illegible]
Allusion to appearance under microscope	
Mr. E. thought appearance	Explosive in Rider solution Mica
Hartshorne which supposed to have formed a	Again in Rider solution Salt &
cause Eggs when boiled the Globe	Strychnine Fertilizer and the Strychnine
	Magnifier separate glass plates between
Spectroscopic examination of lamp by Sif-	Magnet & falling substance permitted
Strong all lines colors & [illegible]	closing the magnet [illegible]
lines of hydrogen	
	Magnifier holds small specimens
A.R. Davis view of Lum Road [illegible]	Magnet tested for [illegible]
Talent [illegible] brought in [illegible]	[illegible]
Glass of Blast [illegible] Cottrell & Gannon	Due Dr. Brown to his Condition

Friday June 18

Continuation of tests with varying compositions to study the effect of salts in mortars in hard water &c.

[illegible]

Bricks [illegible] lime [illegible] by Mr. Smith [illegible] experiments another on pumice.

[illegible] to Mr. [illegible] sell at 36 candles [illegible] issue to 28 [illegible] different [illegible] [illegible] 70 before [illegible]

[illegible] - We cash [illegible] [illegible]

Station of the small lamps arranged for [illegible] Book No. 63 page 167

Small [illegible] disappointed [illegible] by Mr. Upton. No information

Electric [illegible] made by Mr. Moore

Bricks [illegible] of magnesia [illegible]

Mr. Green Moore [illegible] to Mr. C.S. drawings

Saturday June 19

[illegible] Engine [illegible] [illegible]

[illegible] Mr. [illegible] to [illegible] [illegible]

Engine being painted by [illegible]

[illegible] by Mr. Moore [illegible]

[illegible] - [illegible] [illegible]

[illegible] excursion [illegible] [illegible]

Mr. G. [illegible] of [illegible] [illegible] patterns for [illegible] [illegible] [illegible] Mr. [illegible] in [illegible] experiments on [illegible] of [illegible] [illegible] [illegible] [illegible] [illegible]

Monday June 21.	Tuesday June 22.
Dynamo belt changed to drive shaft	Half lamps lit in usual offices
Engines started at 10 a.m.	Vanilla lit both staying quarters
	Engines stopped 2 p.m. only ab 4/4 in Silver Horse Repair shop 4.45 P.M.
Half lamp lit 7 to 8 & 10 to 11 p.m.	Automatic Revolt dynamo stopped 2 a.m.
Vanilla	Lamps turned out at commencement
Hourly guards officials for letting by Mess. Berth 6.8 Apr 1.23	Vanilla turned on the usual hour for lighting
Tiers full & being drawn from Depot. Fla lin of Bars 1.6.12	One engineman in detaining quarters
Lamp Posts burning P.M.	One stoker lit lamps Nor
Engine and steeple	Small gas dynamo or motor for Valcomb yard of ponds
Engine 1 to 6 & 7 to 8 (Sundays) Omission in Mr. of [illegible]	One Engineman in charge [illegible]
Of lamp posts & Mr. [illegible] case [illegible]	Vanilla to the fire pitch of [illegible] Gell
	Back [illegible] three afternoon lamps Ho. Hosline

Wednesday June 23.

Olivenhain Castle went to visit instead
Vermont generator near Whitaker.

Exp. with Edison wire in little metal tube in
Cl. of ch. carbon connection. Circuit
gave broken in shaken circuit.
Carried pieces longer when on
the wire as solution was released. The
longer the solution the more rec. the
carrying action.

Flat lamp with 67 ohms and carbon
gave 22 candles. Then with little
resistance of ammeter gave 31.3
But found no carbon effect here, more effect
by carbonization. Then primer
point in which to carbonize
Kept length below. Cut pieces made
and tried by heat. Length below
only made worse

Since pass of same current on Bruno
Room little to same length of wire
Machine runs 1500 ohm. Not enough for
one lamp. To be changed to 2500

Gave Exp. same as by Dr. Mikan & Ame
Mercury applied by Hair & Lately

Fielder Sutton & Bailey have other funds
Sent due Birmingham & London on Stage

Nitric Acid. Left to make by Elec current
Some calcium carbonate boiled in
Treated with aqua ammonia
Solid crystals in mother liquor
of Nitric Acid formed

Thursday June [illegible]

[illegible] Birmingham [illegible]
Lana Lange is working picking up for work

Back plan lamps Ceiling No. 39-218

Director Mr. Ehrm [illegible]

Gen. Shop [illegible]

[illegible]

[illegible]

Lamps Sinal [illegible] 2 candles
Leader 3 h. 28 m. - one at Mass
Vision 2 candles 2-30 [illegible]
[illegible] long plan 1-12 [illegible]
[illegible]
+ P.R. [illegible]
+ [illegible]

Magnetic Separator Strong
Planning plan for large for
general use.

Friday June 25

Hidden Joe and Meredith on Mr. Connor
Ca. lot of orders of general [illegible]

Gorge Bradley calling from Bin [illegible]
and plan leaf for [illegible]

Paper Inventor American Society
Know ok [illegible] of [illegible]
Leader lamps, [illegible] to [illegible]

Gets [illegible] and high [illegible]
Book Page 117 to 173 [illegible]
Hallerin received this a.m. and land
[illegible] 346 [illegible] per
candle [illegible] 346 to day

Saturday June 26

Power Harvey plows, etc. left in Camp yesterday this A.M.

Wilson Cooke & Company Cow Auction Sale at Union Stockyards

Test Camp Bath. No. 2 pag. 175 Test. Wax Candles on hand 100 pieces [illegible] Lard. Die Wax Candles 90 [illegible] 67.5 pounds per Case [illegible] Globe Lamp Burners [illegible]

Bale in Tin Mew on horses back to day in D.C.

Camp P.M. Reg. Hotel Lamp 223 [illegible] Receiving Page 2 of Same [illegible] Described 15 [illegible] Hole

Wrote one Mule in hospital Rac. [illegible] Cow Jackson 746

[illegible] Cow Jackson, 145 Sandies in hospital Cow Jackson 146

Sheaves Rob on Cartridge Fuse

Monday June 28

Camp Bath. Sent Contract Dressing & Surray.

Mr. Bates [illegible] Absence due days

Carlington Brown left Bathcam Sick first class Bring my gown.

Gette Machine listed gone 190 Balls. 9 Lamps left behind [illegible] in Stock

Dental Vulcanizer lamp 113 bot. 10c.

N 92 Ft. Clay Box candles 12 bot 1P
Bots 42 pge 22960.

Carbonic exp. effects Man carbon
Dioxide Phen. li. in [illegible] and
Contain hydro carbon

Vesicles, Pot. [illegible] Lilac [illegible]
[illegible] [illegible]

June 29

Edison Sofa Back plan required —
Bots 42 pge 25713 3.5 C Day Blue
Amer in Book No 103.

Plan of Electric Under way again
by Mr. Barton Mr Bots 42 pg 102

Gem Monitor bath 790 cold
Nu candles Day Blue life for Min
at [illegible] c. 103/4c 5—

Lamp Reg Bat Resistance 194 ohm
Hoc. No blue high Vac scale

Off in 35 Minutes
Lamp Estimates Co. Nov. 18 pge 17—115
Blue at 13 c. life at 16 hr. 1 hr +
Recd c 75

Electric Messenger in daylight can
again secured by Mr B.

Lightning rods 1/8 x 1/2 Bots 12 x 12
Trains 10 x 10 Bots 1 colour only gilt
cost.

Wires on Earth 2 32 Prime 5 [illegible]
Work Hoc Day Night [illegible]
5 Mr 71 for Vis per candle

Small piece Prime — [illegible]
Cream [illegible] Two layers — 10 in [illegible]

Mr Edison Sent Not Received Orders

Wednesday June 30

Best Lamp 5.12 280 Ohms
of 18½ candles a little blue
[illegible] 18c. Mazda throw to Microtic
2510 ft. burned average Amt. 9.08
ft. lb per candle. Price 63-8970.
2 Lamp 5.12 Volts 5 M. at 18c. 100
candle Regular, 10½ ft lbs per candle

Small dynamo [illegible] 2 in Rear
Magnet [illegible] wire - [illegible]

[illegible] Dynamo Sy. Bottom Bye 61 Volts
Fuse [illegible]

Experimental Lebrocomotive Use
of 20 Ker - 2810 Carbonized Fila
27 Volts. Defer carbon Lamp

Discovery [illegible] in [illegible] charge
light the [illegible] large the other [illegible]
to test the efficiency [illegible] Lighting
[illegible] in Three Regular in large
Fan

[illegible] on out [illegible] for [illegible]
Experiments made by [illegible]

New Microscope [illegible] by [illegible]
[illegible] Microscope [illegible] appearance [illegible]
[illegible] in [illegible] [illegible] and
in detail

New Large Moore Tube Photo
[illegible] Design & [illegible] by
Mr. Batchelor to [illegible] August
expressly for [illegible]

Visitors: Germany [illegible] Pedro
Habana Mr. & [illegible] 5th East.

Thursday July 1. 80

Condition of the [illegible] Corp
is [illegible] 1892 Manila according
to [illegible] Last [illegible] 5.0320 Lim.
5.2047 per Mile inch. Last 0.022,012
166.0012 7.099 per Mile inch. Minimum
5.2207 per Mile inch.

Elec Messenger Mr. B. directed forming
for Mass diagram of motor & and 4
designed on 3 Mass. for Mr. Messenger

Wire-poles lamp in Kimball office
Work on poles till 4 P.M. [illegible]

Gas works at Paint factory [illegible]
Work and [illegible] diagram [illegible]

Electric Messenger [illegible] commence
for superintendence of track on poles

Remarks [illegible] on the other day has
[illegible] work [illegible] day

Complaint [illegible] on [illegible] lot B.
Mass Glass [illegible] in [illegible] [illegible]

Work on [illegible] down on [illegible]
Question of school [illegible]

Foreman Mr. [illegible] dressing
[illegible] for [illegible] by [illegible]

Friday, July 2.

Pumps 400 [illegible]

Work [illegible] cutting [illegible]
Training [illegible] by [illegible]

Visit to Mr. [illegible] & [illegible]
[illegible]

Saturday July 3.

Pump & Magnet exp. to be made Book No 5 page 276 drawn by G.	Journals of Committees cut and sewn with Rubber Metal.
Pump Sub Lamp attached [illegible]	One Brass Rook Mark contains gold first frame by Mr E. Mr Mark
[illegible]	Pump Made with crooked connection between deck & gauge tube to prevent if possible the exp. flow of mercury
R.R. Station [illegible]	R.R. Station and Semaphore Block Brass Ready
Magnetic Boards [illegible] Well pen struck to make 20 Drawn capacity 7 & Concession Sub. Sc/ pg 240	Magnetic board Drawn Began [illegible]
Large Size Locomotive Armature placed on Driving Box with [illegible] for on Railroading	Letters for sale of the Manuscript being made by Andrew J. Reed

Platinum filaments in atmosphere of
Hydrogen and Platinum
Hydrogen in one dispersion cast
solution and hydrocarbons, etc.

Pillman bar ... tracts

Wednesday, July 7

Trials, Effect on Ts and Elec
Lighting of Ordinary Rail Roads
Experiments made by Mr. Edison
and given to Prof. on Sunday
Experiments made in Edison's
Tools, Switch, Fuse & charging

Electric Central Station Fire on
by conducting current to Tracks to
Prevent damage when one for tracks
water electric motor. Both sketches
by Mr. Edison during my absence

See in book 105 page 3. List of

Applications of motors & power to
be made.

Men commenced digging for foundation
for Edison engine adjoining Pattern
room.

Off. Dawson took on Monday for
Great

See Cumulative room slightly injured
yesterday by a cross-

July 7

Large & former pattern room
Keeps by Mr. Edison left place were
often out on a saturday night and

Gas brackets being drawn by Mr. Edison

~~Room & portable for Edison Dynamo~~
Now arranged. Pattern room and stock

See Dynamos and Sketches
of above Brackets in Note Book

Thursday July 8

Lamp 5th Sparkes observations Book 6 & Page 145. One scale of Pump Book 10 page 6
Filled to 30 in. Not enough remained with
Sparkes lamp in Dynamo current, Copied
on Sparks tables in middle from vacuum
Book 10 to 10.

Tube stales lightness and measured from
each lamp near bd of tube.

1st Bank Lamps on lamp as near what
stated 8 per H.P. 16 candles burning
at 445 M. time 20 minutes later
2 lamp burned more than 20 minutes and 11.30
burned 5 hours.

Sparkes vol 2 Calcium iron in place of
Manganese

Conductor tubes. Two large ones at Clark
today on ground time, end exp.

Pump lamp sealed on card after
vacuum added off between gauge
Wind drop tubes. Left to burn to
note water. Bottage cords be de-
liver by fall of mercury in gauge tube

Working drawings of the installation
of Mills and examination on page
2 Book No. 108 commenced today

Edison Car passed for passing on the
Magnets 40 for inside shell is being
prepared for it by Smith.

Air Aviation repaired at Machine
Shop at Midnight one H.P.
Engine 120 with quadrupers and
Shed

Pump with gauge attached
Hand of [illegible]

Beale Maguire wound up Capriccio's

Visitors Mr & Mrs Cohen and Dr. wrote their California friends

Friday July 9

Pelton Secondary Commutator dark slight discoloration of Edison Incandescent Lamp

Wheeler Geo by Burlington 2.00

Andrews & Lane room Steam Eng 100 H.P. 76 Crane 2 H.P. 4.3 Lehmann calcic eng 2 H.P. 26.5 Otto Gas Engine 26.4

Lower gear sch running in the Platter to crown together with worm

Long Carbon 275 ohms cold Burns 194.42 74 Time 1 st 6.9 on hour 166

Assistant pulleys poles leading to L. Fact

Mr. John Cunningham & Co. commenced cutting iron Gas pipes at Lamp Factory

Mord Miller Dean running the four year cutting spindles from one armature shaft to polish the bearings

Albert Mr. Edison went to N.Y. 11.22 but early evening

Maguire Dock, Lizzie is practicing on Bowlear.

Capitan Falcon, school like school of service mile. received Mr. Shaft of Capriccio, on Motor pneumatic Brush No 108 for 14 hr.

Saturday July 10

Clay's Pole a member of Council	Work general. Fin. Saturday Finish on Monday
X Large pole after design by Jennie	in Clay's Meadow. The former is still on
Adjourned this Morning.	Carlton Falcon Scribb and Snow hoe
	Cut Bank on Magnolia Road. Sugar
Palmetto Lawn. Lawn from Burns	New Man on gear of Elm Grove plow
Tedder Rec 012 453 Hours 004 300	Force at Lawn factory. Going on N.R.
26 pen Ap. at 17 cents Bal. up 26	4 Gondoliers going at work. Jennie
Bancroft from 6th saw tedder 17 Oct 1 Rec	Finishing up house Miller. Bruce Stone
122 - 8.6 pen Ap. Rec Oct 11th - Bal - 28	For 5th hundred of Bunder Fence
Pleasant Hill. Mare here with plow	Hammer & Dan Clark on cob corn. Pat
Sues and tedders filling up lawn (Bolton)	Carlton & Freeman testing. Mel is
	6 Clark still absent
Pump with three contractors means	
by Oldham this by Nell & pumpmen	
an improvement on the other	
Thresh leaving Sugar cutting off cane	
Hamilton Stamping Lawn Bunch	
leaving for seven years	

Monday July 12

Lesson Mr. Wilson

Examine pupils at 9 o'clock. Dismiss school. Dinner 11.15 M.

Telephone Elec. Sig. Co. Magnets on line of Galena. Ordered long levers

Examine another burned out of Field Machine. Solder melted, hole not in coil.

Force out armature from light. Try on pulley to armature & pulley. Give up pulling up lever for lever in armature of the vacuum. Order

Double lamp Holt 103 of D. & O. Guarantee of Double lamp Holt

Circuit changer Frances Tell. a motor area by revolving body a [illegible]

Encounter Female Sable which by use of four brushes the current could be readily and rapidly changed

Explain Tolson again experiments. Using larger motor in place of one burned out by current from some Machine the other night. Wire 1639 [illegible] of a dynamo

Tuesday July 12.

Lamb wires on loading platform new Davey stopper to test and experimenting on carbon deposits.	Wood Miller Dean but blows in + New Miller found it to work nicely got finish time.
Rust Mr. Upton	Coal dust burner Masons common caping the water for power purposing
Current changes since this morning for Swanson tests on Pots Room Road lamp shown and explaining for the	Carbons to be treated with different solutions and burned 105 page 21 Vol.
Carbon Vol. 105 Again tried with new Holm lamp 12 ... as usual	
Varied big gas in one burge for installing in cooling room &c. Afterwards with Lis burner the carbon same 1773.	Barnhart lamp carbon split separating into fibres. Moves before Dennison lamp
A.R. Tracks, tests ... 105	
Found gloma badly. 103 page 113	

Baker Adam & Machine	102 V	
Blair Wilber Exh	102 V	
Cato Wm. Batt Lamps	103 V	
Wm. Mains of Lamps & Dynamo	5-96	
Cardone Jas. G	105 V	
Francis	104 V	
Eugene Mortes of Machine for Gomez		
Stebis plan for Lamps Rec. 50	106	
Wappnie Johnson Rec. 80 Apr. 25		
Fleming	101 V	
Edison	105 V	

On war letter and
Sale of Potassium Cyanide
in water and [illegible]
Bin packs, through [illegible]
Lines like cotton [illegible]
for the Ice plant of
Chas. Thomas, [illegible]
of Alexis [illegible]
the plant.

56 cannes 5.4 [illegible]
Brass 800 cannes [illegible]
home cannes 24 [illegible]
285 ft. the pla cannes [illegible]
for the [illegible] 9 cannes [illegible] 5
Car dles 2520 ft ho [illegible]
[illegible] page 187